



UNITED STATES PATENT AND TRADEMARK OFFICE

H.P.

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,303	01/23/2004	Gonzalo Gaston	200209835-1	4629

22879 7590 06/28/2006

HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER

GOLDBERG, BRIAN J

ART UNIT PAPER NUMBER

2861

DATE MAILED: 06/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/762,303	Applicant(s) GASTON ET AL.	
	Examiner Brian Goldberg	Art Unit 2861	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16, 18-21 and 23-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16, 18-21 and 23-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant's arguments, filed 6/2/06, with respect to the rejection(s) of claim(s) 1-6, 9-14, 16 and 23-25 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of a newly found prior art reference, cited below.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Kawai et al. (JP2002211007).

3. Regarding claim 1, Kawai et al. disclose "a hardcopy device comprising a printhead (Par [0015]), a spittoon (2 of Fig 1) arranged to receive ink from said printhead (through 1 of Fig 1), and a heater (4 of Fig 1) arranged to heat ink received in said spittoon (see abstract).

4. Regarding claim 12, Kawai et al. disclose "a service station module for a hardcopy device (pictured in Fig 1), said module comprising a spittoon (2 of Fig 1) and a heater (4 of Fig 1) for said spittoon."

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2-6, 10, 11, 14, 16, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klausbruckner et al. in view of Kawai et al.

7. Regarding claims 2-6 and 10, 11, and 14, Klausbruckner et al. disclose:

8. Claim 2: "wherein said spittoon is movably mounted on said hardcopy device (col 4 ln 52-54)"

9. Claim 3: "wherein said spittoon is mounted on a rotatable drum (12 of Fig 6 and col 5 ln 3-5)"

10. Claim 4: "wherein said printhead (14 of Fig 1) is fixedly mounted on said hardcopy device adjacent to said drum (see Fig 2), and wherein a print media carrier (12, 16, 18 and col 2 ln 66 – col 3 ln 6) is provided on said drum"

11. Claim 5: "further comprising a scraper (54 of Fig 6) adjacent to said drum, said scraper being spaced from said printhead circumferentially around said drum (see Fig 1)". The scraper is spaced from said print head (for example, the print head of figure 1 with the arrow of 14 pointing to it) circumferentially around said drum.

12. Claim 6: "wherein said scraper is arranged to be moved radially relative to a circumferential surface of said drum (col 4 ln 61-65)"

13. Claim 10: "further comprising a controller, said controller controlling said printhead to eject ink into said spittoon (col 2 ln 59-65 and col 5 ln 24-27, ln 51-55)

14. Claim 11: "a hardcopy device comprising means defining a print media path (12, 16, 18, 22 of Fig 2), printing means (14 of Fig 2) arranged to fire ink at a print media as it moves along said path, spittoon means for receiving waste ink from said printing means (56 of Fig 5), means for producing relative movement between said printing means and said spittoon means (62, 64, 66, 68 of Fig 6)"

15. Claim 14: "a method of operating a hardcopy device...comprising the steps of: producing relative movement of said printhead and said spittoon to bring them into a mutually adjacent position (col 5 ln 47-54); firing ink from said printhead into said spittoon (col 5 ln 54-55)."

16. Claim 23: "a scraper attached to a chassis (col 5 ln 32-36) and spaced circumferentially around said drum away from said print head (see Fig 1)." The scraper is part of the service station, which could be mounted on the device chassis as stated. The scraper is also spaced away from said print head (for example, the print head of figure 1 with the arrow of 14 pointing to it) circumferentially around said drum.

17. Thus Klausbruckner et al. meet the claimed invention except a heater arranged to heat ink, or means for heating ink, received in said spittoon (said spittoon being arranged to receive ink from said printhead). Kawai et al. teach providing a heater (4 of Fig 1) arranged to heat ink received in said spittoon (see abstract), (said spittoon (2 of Fig 1) being arranged to receive ink from said printhead (through 1 of Fig 1). It would have been obvious to one of ordinary skill in the art at the time of the applicant's

Art Unit: 2861

invention to provide the spittoon and heater arrangement of Kawai et al. in place of the spittoon of Klausbruckner et al. within the service station of Klausbruckner et al. One would have been motivated to so modify Klausbruckner et al. for the benefit of heating the ink to dry it, which decreases the volume, and obtains a cost effective, space saving ink collecting section, as stated by Kawai et al.

18. Regarding claim 16, Klausbruckner et al. in view of Kawai et al. disclose the claimed invention as set forth above with respect to claim 14 as well as a controller as set forth above with respect to claim 10. With the use of a controller, it is inherent that a computer program on a computer readable medium for performing the method would be run on a processing device associated with a suitable hardcopy device.

19. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klausbruckner et al. in view of Kawai et al. and further in view of Gaylor et al. and Phillips et al. Klausbruckner et al. in view of Kawai et al. disclose the claimed invention as set forth above regarding claim 6. Klausbruckner et al. further disclose "wherein said drum has a width (see 12 of Fig 1)." Thus Klausbruckner et al. in view of Kawai et al. meet the claimed invention except "said scraper extends along substantially the entirety of said width of said drum and is arranged to be moved in a reciprocating manner in a circumferential direction and parallel to the circumferential surface of said drum."

20. Gaylor et al. teach "said scraper extends along substantially the entirety of said width of said drum (120 of Fig 3)." It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to provide a scraper that extends along the entire width of the drum. One would have been motivated to so modify the scraper

of Klausbruckner et al. for the benefit of increasing the area that the scraper can scrape in one motion to improve its efficiency.

21. Phillips et al. teach "said scraper (324 of Fig 3) is arranged to be moved in a reciprocating manner (arrow 314 of Fig 3) in a circumferential direction and parallel to the circumferential surface of said drum (14 of Fig 3)." It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to arrange the scraper to be moved in the manner described. One would have been motivated to so modify the scraper of Klausbruckner et al. for the benefit of maintaining a printhead assembly within a relatively tight space in a hardcopy device, as stated by Phillips et al.

22. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klausbruckner et al. in view of Kawai et al. and further in view of Phillips et al. Klausbruckner et al. in view of Kawai et al. disclose the claimed invention as set forth above regarding claim 3. Thus the claimed invention is met except "wherein said printhead is movably mounted on said hardcopy device and wherein said hardcopy device includes a print media path, wherein said printhead is moveable between a first, printing, disposition in which it is positioned adjacent to said print media path and a second, servicing disposition, in which it is positioned adjacent said drum."

23. Phillips et al. teach "wherein said printhead is movably mounted on said hardcopy device (Fig 4) and wherein said hardcopy device includes a print media path (40 of Fig 1), wherein said printhead is moveable between a first, printing, disposition in which it is positioned adjacent to said print media path and a second, servicing disposition, in which it is positioned adjacent said drum (Fig 4 and col 6 ln 19-23)." It

Art Unit: 2861

would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to provide a movably mounted printhead, as described, and a print media path. One would have been motivated to so modify the Klausbruckner et al. and Kawai et al. combination for the benefit of "maintaining a printhead assembly within a relatively tight space," as stated by Phillips et al. in column 2, lines 20-21.

24. Claims 9 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawai et al. in view of Steinfield et al. Kawai et al. disclose the claimed invention as set forth above regarding claims 1 and 12. Thus Kawai et al. meet the claimed invention except "wherein said heater comprises an electrical resistance/heating element."

25. Steinfield et al. teach "wherein said heater comprises an electrical resistance/heating element (col 6 ln 41-43)." It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to provide an electrical resistance element as the heater of Kawai et al. since Kawai et al. disclose a heat source, which could be an electrical circuit, and the electrical resistance element of Steinfield et al. is one such circuit.

26. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Klausbruckner et al. in view of Kawai et al. and further in view Gaylor et al. Klausbruckner et al. in view of Kawai et al. disclose the claimed invention as set forth above regarding claim 14. Klausbruckner et al. further disclose "providing relative movement of said printhead and said spittoon to bring them into non-adjacent positions (col 5 ln 27-29)." Thus the claimed invention is met except "removing the contents of said spittoon."

27. Gaylor et al. teach "removing the contents of said spittoon (120 of Fig 3 and col 8 ln 23-24)." It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to remove the contents of the spittoon. One would have been motivated to so modify Klausbruckner et al. for the benefit of limiting the amount of ink that builds up in the spittoon by clearing the spittoon of ink to allow for more spitting of ink when necessary.

28. Claims 18-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gaylor et al. in view of Klausbruckner et al. and further in view of Phillips et al.

29. Regarding claims 18 and 19, Gaylor et al. disclose "a hardcopy device comprising a rotatable drum (90 of Fig 3) having a circumferential surface (area around 95 of Fig 3)...and said circumferential surface having a width (see width of 90 of Fig 3), an elongated spittoon region extending across substantially the entirety of said width of the circumferential surface of said drum (area around 95 of Fig 3), and a removal device for removing any contents of said spittoon region (120 of Fig 3), said removal device being movable radially relative to said drum (col 8 ln 59-61)." The removable device 120 is moving radially *relative* to the drum 90. Thus Gaylor et al. meet the claimed invention except "a print media carrier region being provided on said circumferential surface" and "said removal device is movable in a circumferential direction and parallel to the circumferential surface of said drum" and "said removal device is movable in a reciprocating manner parallel to the circumferential surface of said drum."

30. Klausbruckner et al. teach "a print media carrier region being provided on said circumferential surface (see region on circumferential surface of 12 touching print media

Art Unit: 2861

22 in Fig 2)." It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to provide a print media carrier on the circumferential surface. One would have been motivated to so modify Gaylor et al. with Klausbruckner et al. for the benefit of moving the print media in a more efficient manner for ink delivery, reducing print time.

31. Phillips et al. teach "said removal device (324 of Fig 3) is movable [in a reciprocating manner (arrow 314 of Fig 3)] in a circumferential direction (arrow 314 of Fig 3) and parallel to the circumferential surface of said drum (14 of Fig 3)." It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to arrange the scraper to be moved in the manner described. One would have been motivated to so modify the scraper of Klausbruckner et al. for the benefit of maintaining a printhead assembly within a relatively tight space in a hardcopy device, as stated by Phillips et al.

32. Regarding claim 20, Gaylor et al. further disclose "wherein said removal device (120 of Fig 3) extends substantially across the entirety of said width of the circumferential surface of said drum (90 of Fig 3)."

33. Regarding claim 21, Gaylor et al. further disclose "wherein said removal device includes a scraper blade (blade of 120 of Fig 3)."

34. Claims 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klausbruckner et al. in view of Kawai et al. and further in view of *In re Japikse*, 181 F.2d 1019, 1023, 86 USPQ 70, 73 (CCPA 1950). Klausbruckner et al. in view of Kawai et al. disclose the claimed invention as set forth above with respect to claim 3. Further,

Art Unit: 2861

In re Japikse teaches that shifting location of parts (in this case, the heater) is considered within the level of ordinary skill in the art, and thus obvious. One would have been motivated to so modify the Klausbruckner et al. in view of Kawai et al. combination for the benefit of accelerating the drying of the ink, as stated by Kawai et al.

35. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gaylor et al. in view of Klausbruckner et al. and Phillips et al. and further in view of Kawai et al. and *In re Japikse*, 181 F.2d 1019, 1023, 86 USPQ 70, 73 (CCPA 1950). Gaylor et al. in view of Klausbruckner et al. and Phillips et al. disclose the claimed invention as set forth above regarding claim 18. Thus Gaylor et al. in view of Klausbruckner et al. and Phillips et al. meet the claimed invention except "further comprising a heater arranged to heat ink received in said spittoon region, the heater positioned below the spittoon region."

36. Kawai et al. teach "a heater (4 of Fig 1) arranged to heat ink received in said spittoon region (see abstract). It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to provide the spittoon and heater arrangement of Kawai et al. in place of the spittoon of Klausbruckner et al. within the service station of Klausbruckner et al. One would have been motivated to so modify Klausbruckner et al. for the benefit of heating the ink to dry it, which decreases the volume, and obtains a cost effective, space saving ink collecting section, as stated by Kawai et al. Further, *In re Japikse* teaches that shifting location of parts (in this case, the heater) is considered within the level of ordinary skill in the art, and thus obvious. One would have been motivated to so modify the Klausbruckner et al. in view of Kawai

Art Unit: 2861

et al. combination for the benefit of accelerating the drying of the ink, as stated by Kawai et al.

Response to Arguments

37. Applicant's arguments with respect to claims 1-16, 18-21, and 23-26 have been considered but are moot in view of the new ground(s) of rejection.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Goldberg whose telephone number is 571-272-2728. The examiner can normally be reached on Monday through Friday, 9AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vip Patel can be reached on 571-272-2458. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2861

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BJG
June 15, 2006



LAMSON NGUYEN
PRIMARY EXAMINER
06/20/06